

We don't just build technology  
We build confidence



The Smallest EVLT ( Varicose vein ) Laser  
We made ( less than 3kg )



## Specification

Laser type	Diode, Semiconductor
Wavelength	1470nm
Max Power	15 watts
Aiming beam	635nm, < 5mw
Operation Mode	Continuous or pulsed
Pulsed Time	0.05ms~1000ms
Beam Delivery	SMA905 connector
Optic Fiber Compatible	Optic fibers having a core from 200um to 1000um, NA=0.22~0.48
Beam Emission Initiation	Footswitch
Controller	Microprocessor
Display	10.1" IPS with touch panel Medical approved
Cooling	Internal, air and thermoelectric cooling
Power supply of the laser	DC 24V/8.33A from the separate AC
Power supply of AC adapter	Single phase 100~240VA; 50-60HZ, Max 90w
AC Adapter	DC 24V/8.33A Medical approved
Laser Dimensions	27cm* 11cm*19 cm length*width*height
Laser weight	2.75kg
Laser case dimensions	56cm × 35cm × 23cm
Weight of laser with cases	9kg
Environmental conditions during work	From +10 to 24°C degree, relative humidity from 30% up to 60%
Cass of Medical Device	IIB
Laser safety Class	4
Electric Safety Class	I type B
Housing Protection Degree	Ip20b
Footswitch Protection Degree	IPX6



## CONTACT US

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## DISTRIBUTOR

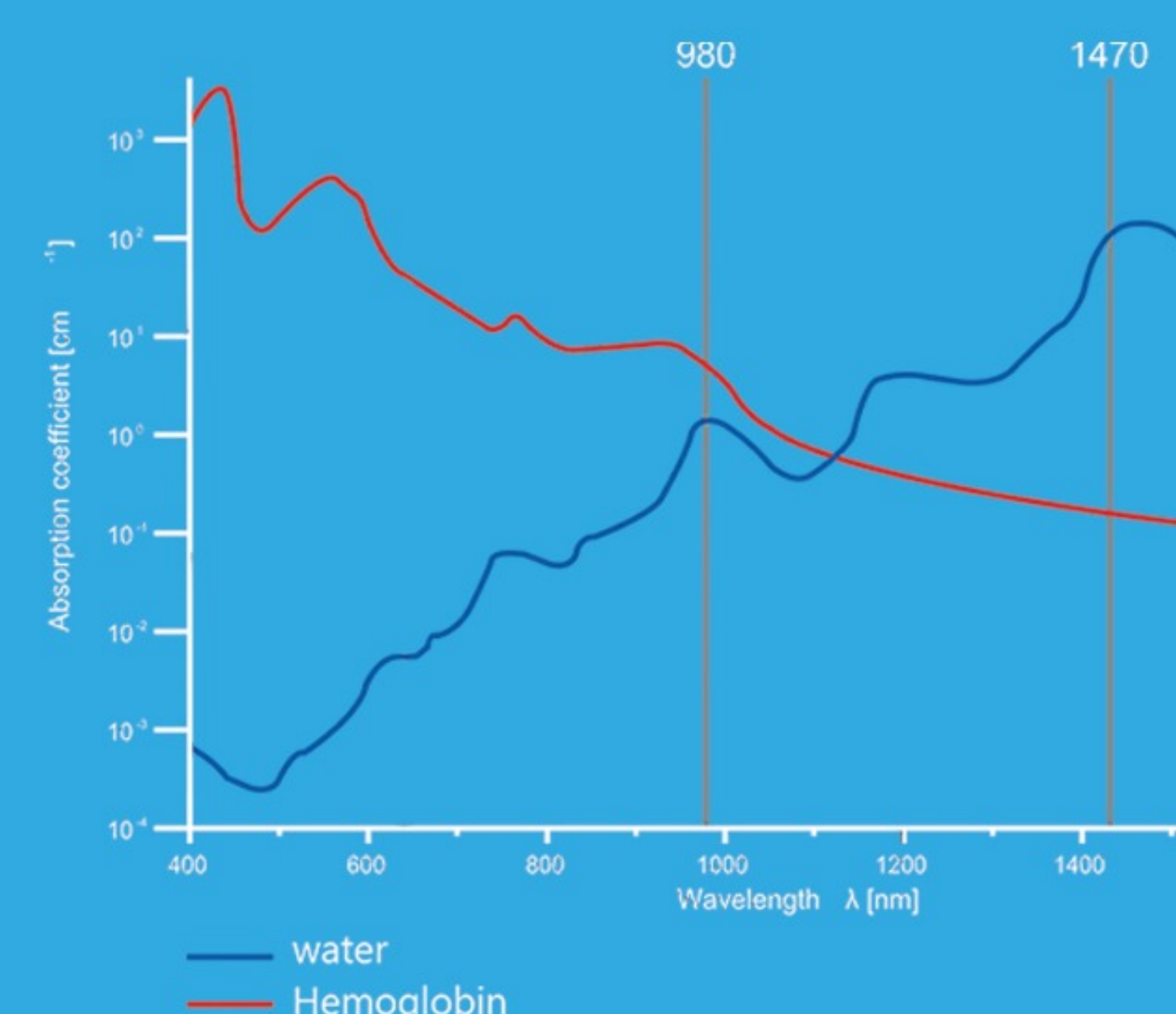


Emergency Switch



Touch Screen Interface

## We Wavelength is recommended

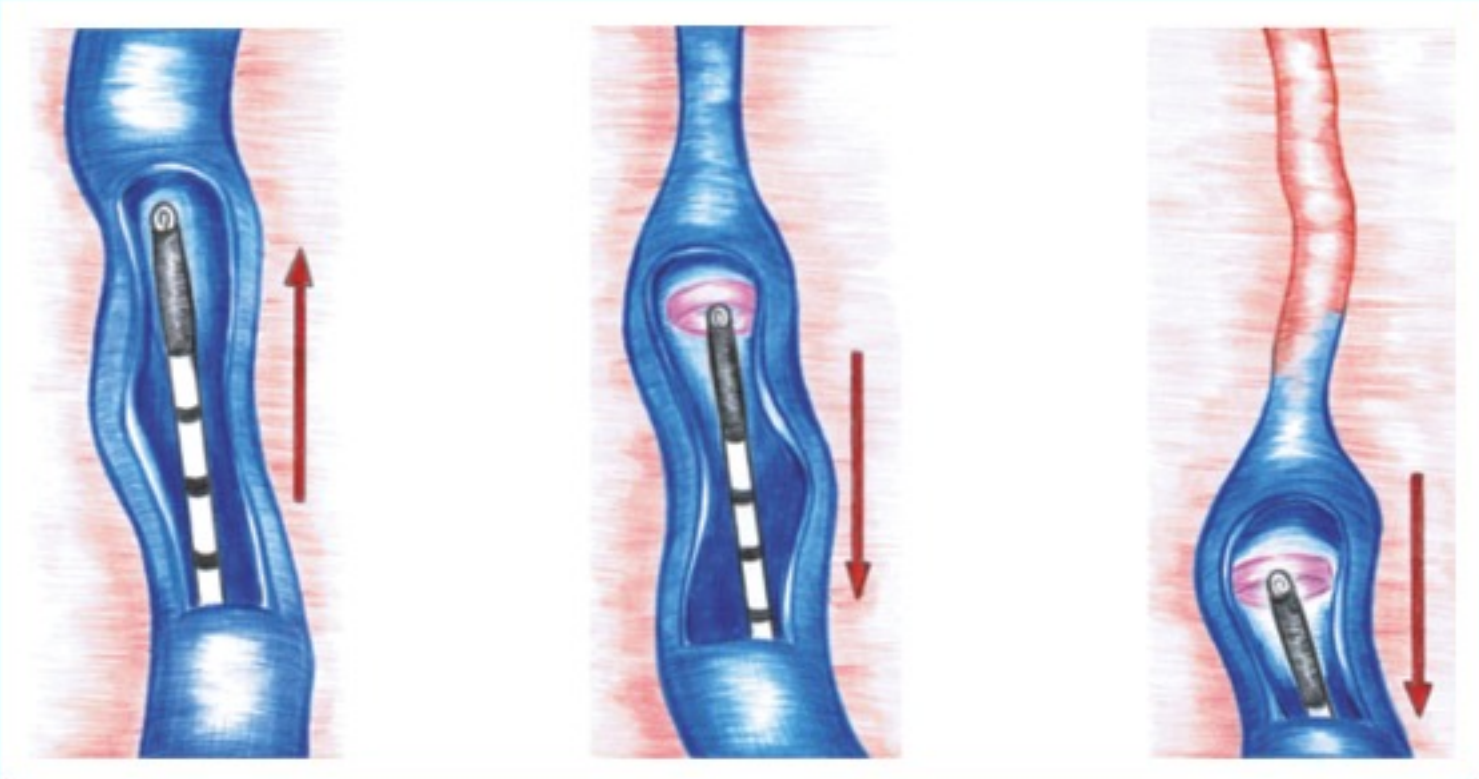


We offer lasers with **980nm** radiation or **1470nm** for EVLT. As seen on the chart the absorption coefficient is higher for haemoglobin than for water for 980nm radiation. For 1470nm the situation is opposite and water absorbs the radiation better than haemoglobin. Both of these media are components of human tissues, including blood and walls of the veins.



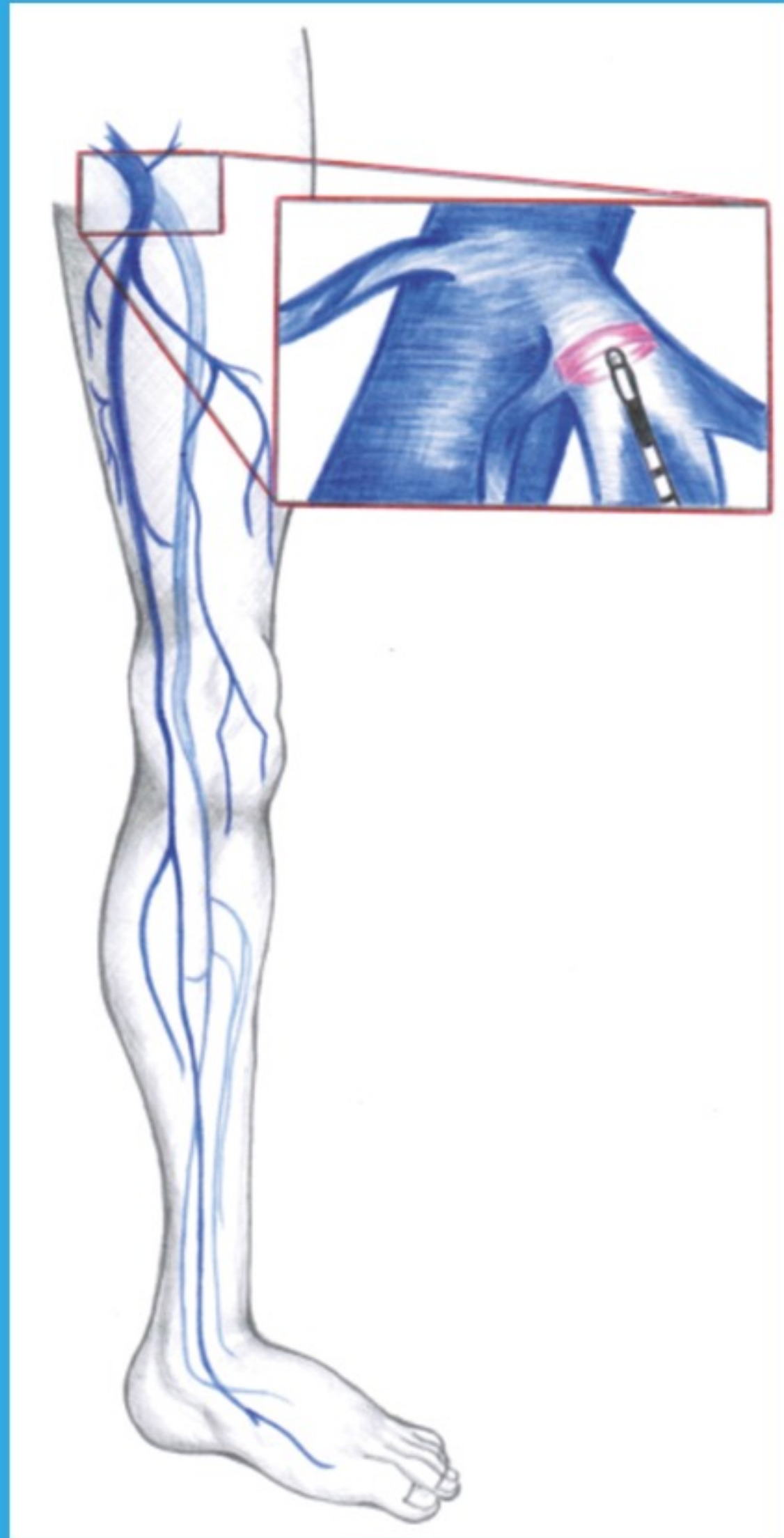
EVLT (Endovenous Laser Treatment) is a procedure leading to occlusion of varicose veins. It involves putting a fibre optic into a saphenous vein through a catheter. Then the laser is turned on and slowly withdrawn from the vein. Thanks to light tissue interaction mainly thermal effects occur, the tissue is heated and the walls of the vein shrink. because of alteration of endothelium and contraction of collagen. There are two possibilities of performing the treatment: with pulsed and continuous-wave laser operation. Using the pulsed operation also the fibre is withdrawn step by step. A better choice is to use continuous-wave laser and to withdraw the fibre also continuously, what provides more homogenous illumination of the vein, less tissue damage outside the vein and better results. The therapy is just a beginning of the occlusion process.

After the treatment the veins are shrinking for several days or weeks. That's why in the long-period observation, very good results are obtained. The main advantage of EVLT is that it's a non-invasive technique in contrast to surgical treatments. It also doesn't involve hospital stay and can be performed in an ambulatory condition with local anaesthesia and lasts for less than 1 hour. After the procedure patient doesn't have any unsightly incisions and scars. Thanks to radial illumination the maximum energy density is directed to the walls of the vein near the fibre and cause immediate occlusion. The simple bare fibre is also possible to use, but it is less effective and more traumatic and requires more optical power.



WHY AR PHOTONICCS ?

- AR Photonics provides choice of 2 types of fibres: with open end or radial with wavelengths 1470nm.
- Cutting edge technology
- Extendable database of predefined therapy protocols which can be modified and assigned to a patient.
- Lowest operating costs
- Very compact and small sized device
- Flexibility of development other customized parameters and OEM products.



ACCESSORIES



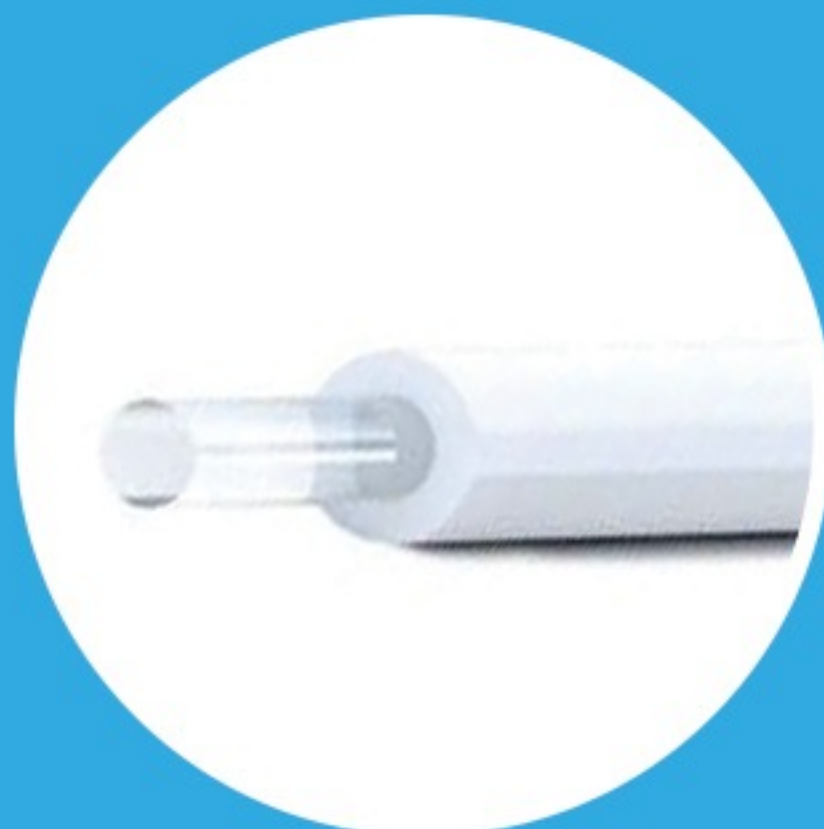
Safety Goggle



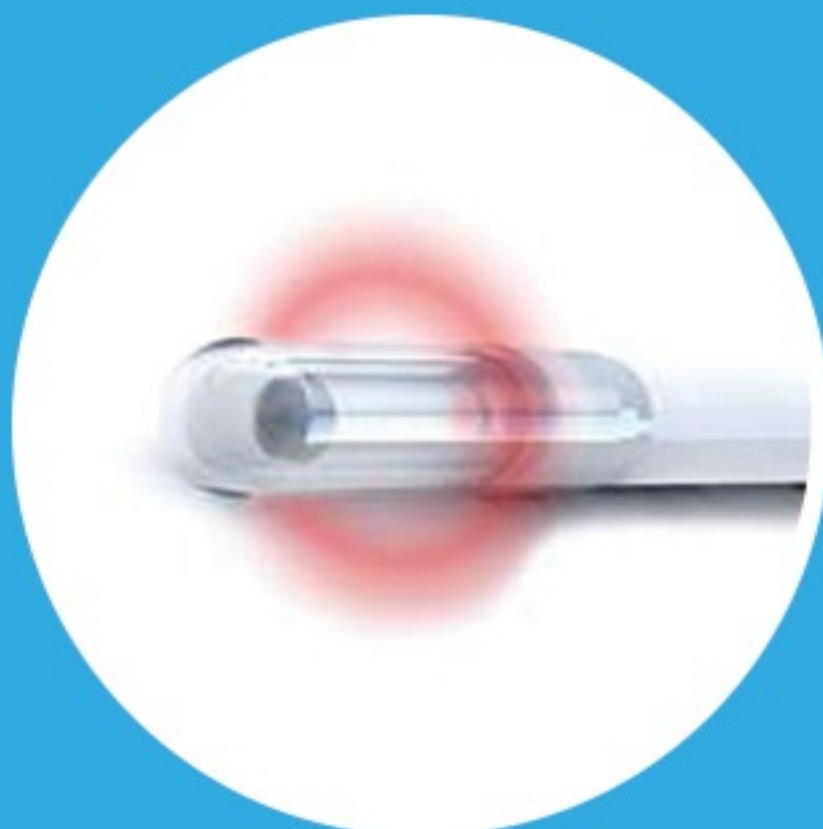
Foot Switch



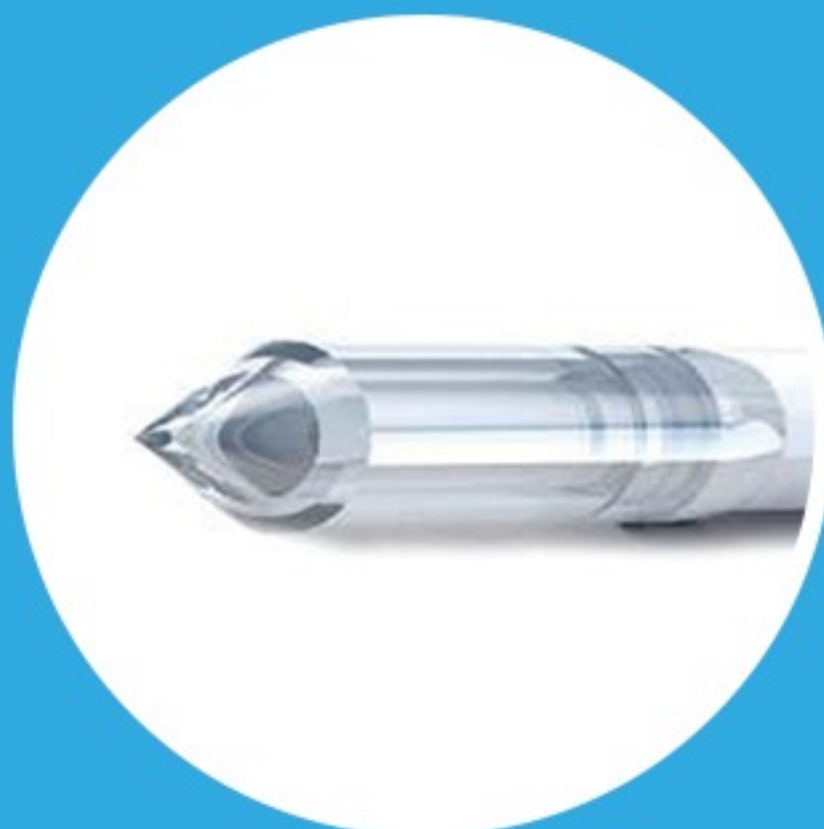
Lock adapter for catheter



Bare Fiber



Radial Fiber



Conical Fiber



Catheter set for radial fiber



Catheter set for bare Fiber



Carrying Case

